

REMARKS

Claims 21-41 are pending and rejected in this application. Claims 21 and 31 are hereby amended.

Responsive to the rejection of claims 21-41 under 35 USC §112, second paragraph, Applicant has amended claims 21 and 31, such that claims 21-41 are definite and distinctly claim the subject matter of the invention. Accordingly, Applicants submit that claims 21-41 are now in allowable form.

Responsive to the rejection of claims 31 and 32 under 35 USC §103(a) as being unpatentable over U.S. Patent No. 5,929,348 (Stein, et al.), Applicants have amended claim 31, and submit that claims 31 and 32 are now in condition for allowance.

Stein et al. discloses a micro-sled impact test device (Figs. 1-3) including impact device 10 for dynamically testing passenger restraint devices, such as seat belts and air bags including base frame 12 having an elevated first horizontal track 14 extending along at least a portion of base frame 12 between a first end 26 and a second end 28. Additionally, base frame 12 includes a second elevated horizontal track 16, opposite first track 14, also extending along a portion of base frame 12 between first and second ends 26 and 28. A pressure differential thrust apparatus 60, for accelerating sled carriage 30 is mounted to base frame 12. Thrust apparatus 60 includes a firing chamber 62 having a movable thrust column 68 for striking impact block 36 and accumulator 66 for storing high pressure compressed gas attached to base frame 12 between first and second tracks 14. Braking system 40 is incorporated in sled carriage 30 for preventing further longitudinal motion of sled carriage 30. Caliper brake 42 may be automatically controlled (column 3, line 47 through column 4, line 55). As sled carriage 30 approaches second end 28,



brake system 40, of sled carriage 30, is activated, thereby causing caliper 42 to frictionally engage brake rail 20 and decelerate sled carriage 30 (column 7, lines 5-8).

In contrast claim 31, as amended, recites in part

a brake device in controlling connection with one of said crash-test carriage and said thrust rod, thereby controlling the acceleration force such that said crash-test carriage accelerates in accordance with a desired acceleration curve.

(Emphasis added) Applicants submit that such an invention is neither taught, discloses nor suggested by Stein, et al. or any of the other cited references, alone or in combination, and includes distinct advantages thereover.

Stein, et al. discloses a micro sled impact test device including a braking system 40 incorporated in sled carriage 30 for preventing further longitudinal motion of sled carriage 30. However, Stein, et al. and any of the other cited references alone or in combination, fail to disclose, teach or suggest a brake device in controlling connection with a crash-test carriage or a thrust rod, thereby controlling the acceleration force such that the crash-test carriage accelerates in accordance with a desired acceleration curve, as recited in claim 31. Applicants' invention controls the acceleration of the crash-test carriage by controllably utilizing the brake to produce the desired acceleration curve. In contrast Stein et al. has a brake that is used to prevent further movement of the device after impact.

An advantage of Applicants' invention is that the braking device is controllable allowing the acceleration of the sled carriage to thereby simulate a crash situation. Another advantage of Applicants' invention is that the brake device can act on the thrust rod allowing the crash-test carriage to roll out at the end of the test. For the forgoing reasons, Applicants submit that claim 31, and claim 32 depending therefrom, are now in condition for allowance, which is hereby respectfully requested.

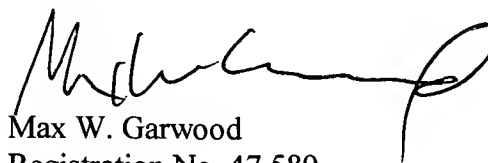


For the foregoing reasons, Applicants submit that the pending claims are definite and do particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Moreover, Applicants submit that no combination of the cited references teaches, discloses or suggests the subject matter of the amended claims. The pending claims are therefore in condition for allowance, and Applicants respectfully request withdrawal of all rejections and allowance of the claims.

In the event Applicants have overlooked the need for an extension of time, an additional extension of time, payment of fee, or additional payment of fee, Applicants hereby conditionally petition therefor and authorizes that any charges be made to Deposit Account No. 20-0095, TAYLOR & AUST, P.C.

Should any question concerning any of the foregoing arise, the Examiner is invited to telephone the undersigned at (260) 897-3400.

Respectfully submitted,



Max W. Garwood
Registration No. 47,589

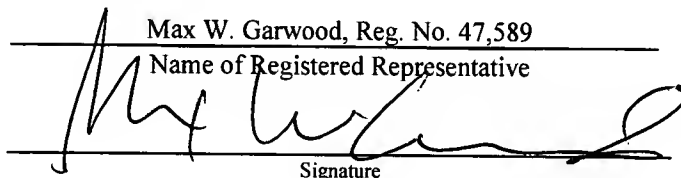
Attorney for Applicant

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Max W. Garwood, Reg. No. 47,589

Name of Registered Representative



Signature

June 24, 2003

Date

TTT6/ar

TAYLOR & AUST, P.C.
142 S. Main Street
P.O. Box 560
Avilla, IN 46710
Telephone: 260-897-3400
Facsimile: 260-897-9300

Enc.: Return postcard